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# Introduction to the Principles of Ceramic Processing

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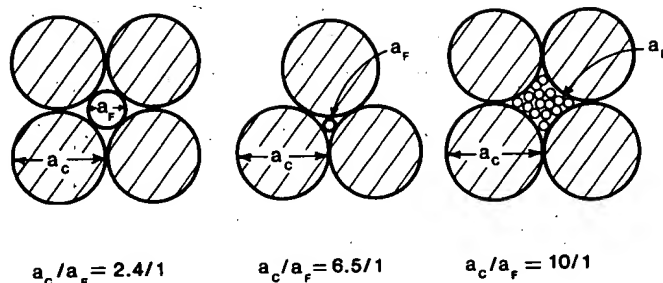


Fig. 13.3 Packing of fine spheres in a planar interstice among coarse particles.

Table 13.3 Packing Density of Mixed Spheres of Different Size

Diameter (cm) (weight fraction of spheres)					Packing Density (%)	
	1:28	0.155	0.028	0.004	Calculated	Experimental
1.000	—	—	—	—	60.5	58.0
0.726	0.274	—	—	—	84.8	80.0
0.647	0.244	0.109	—	—	95.2	89.8
0.607	0.230	0.102	0.061	—	97.5	95.1

Source: R.K. McGeary, *J. Am. Ceram. Soc.* 44(10), 513-522 (1961).  
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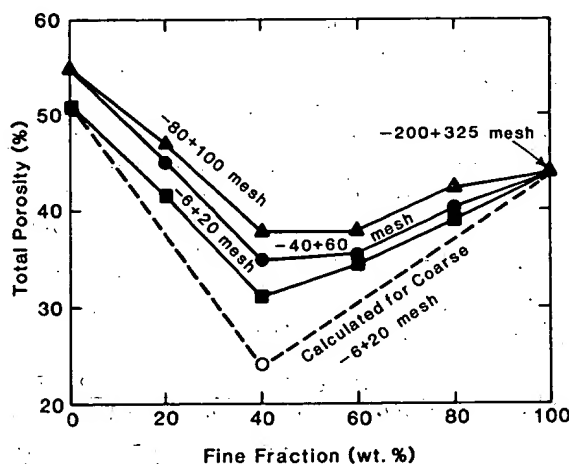


Fig. 13.4 Calculated and experimental total porosity for vibrated, two-component mixtures of tabular alumina fines (-200 + 325 mesh) and three different coarse fractions. (Note: particles are porous.)

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